# CS 521- Final project- Instructions

# Dec-19-2020 [bouyang@bu.edu](mailto:bouyang@bu.edu) Beining Ouyang

## Packages need to be installed:

numpy (pip install numpy): Turn on the terminal: type in “pip install numpy”

tqdm (pip install tqdm): Turn on the terminal: type in “pip install tqdm”

tflearn (pip install tflearn): Turn on the terminal: type in “pip install tflearn”

matplotlib (pip install matplotlib): Turn on the terminal: type in “pip install matplotlib”

tensorflow (pip install tensorflow): Turn on the terminal: type in “pip install tensorflow”

## How to run?

The model training code is not included. (Not my own code).

After installing all the packages. Please only run “Run\_this\_code.py” in pycharm.

The model is already trained, it is included in the submission folder. It will be loaded when you run “ Run\_this\_code.py”.

The unlabeled testing images are also included in the submission folder.

“Run\_this\_code.py” will ask you to input an integer from 1 to 12500.

It will show: We have 12500 unlabeled pictures, how many of them do you want to classify?” Then it will feed the input number of images through a CNN for classification and print how many dogs and cats were found.

It will also save the results as a CSV file “classify\_result\_file” in the submission folder.

For example: if the user wants to classify 34 pictures in the testing set, the program will process and return “We detected 16 dogs and 18 cats.”